

Applicant's Invention Is Entirely Different Than The References

As described in the Summary of the Invention, the invention is directed to an economical glass panel having decorative patterns formed on at least one surface, whereby those patterns simulate raised strips of metal. In the present invention, a single sheet of glass is made to look like it actually has raised beads of metal applied to thereto. However, the invention departs from the more traditional and expensive approach in that raised beads of resin covered by metal foil are applied, rather than actually applying raised beads of metal.

The look of strips of metal is achieved by first applying the raised bead of acrylic resin in a desired pattern on the surface of a single glass panel. A metal film is then applied over the crown of the raised bead of resin to complete the simulated metal strip. This differs from other metal decorating techniques in which a relatively thin flat ink is applied to a glass panel then covered with a metal strip.

The word "bead" is defined in Webster's Third New International Dictionary to mean "a projecting rim, band, or molding; a small salient molding of rounded surface, continuous or broken, the section being usually being an arc of a circle." This differs considerably from the definition of the word "film" which is defined by Webster's Third New International Dictionary to mean "an exceedingly thin layer".

Applicant submits that it is this "bead" of resin which, when covered by a film of aluminum or chrome metal, simulates a raised "bead" of metal. This is not achieved by the prior art which applies a "film" of ink, which is then covered with some metallic layer. The look is entirely different. It is this raised profile of the resin bead that gives the invention the look of an actual metal strip having a perceptible raised thickness. Accordingly, Applicant's invention

provides a simulated metal strip for adorning glass panels which has the appearance of a solid metal bead or strip, but which is much less expensive to produce than the solid metal approach.

This inventive concept is very different from the principal references cited by the Examiner. The European Patent '354 (Caymen et al.) "silk screens" or "paints" a layer or film of adhesive ink to glass then compresses a metallic foil against the adhesive ink layer. The Caymen et al. reference is really used to decorate bottles, dishes, and glasses. Similarly the Hirahara patent ('344) is also directed to a process in which a thin layer of ink is silk screened onto glass, then covered with foil. Neither of these processes result in a "raised bead" at least 0.8 mm about the glass surface. The Kume et al. ('365) is also directed to a process for applying ink to a label substrate. It is not a process for applying a bead to a glass panel.

The Claims Are Not Unpatentable as the Examiner has Not Made Out A Prima-Facie Case of Obviousness

The Examiner has the burden to establish a Prima-Facie case of obviousness when rejecting Claims under 35 U.S.C. § 103 (a). The problem with the Examiner's rejection is that the prior art simply does not teach the invention whether taken singularly, or combined as done by the Examiner. There is no reference which shows the heart of the invention in which is the application of a raised rounded "bead" of resin to a glass panel in a prescribed pattern to simulate metallic strips. Thin layers of ink cannot be equated to raised rounded beads of resin.

The claims have been amended to even further point out that the term "bead" is different from the prior art. In the claims as now presented, the beads are rounded and have a minimum height of 0.8 mm (.031 inches) above the surface of the glass at the highest point. This is much more of a raised appearance, as it is many times thicker than a film, generally considered to be

0.001-0.009 inches (again see Webster's). The claims also have a width dimension (at least 2 mm)

Even Further, Claim 17 requires that the resin bead be air cured at room temperature for 24-48 hours until reaching a hardness of 65% prior to the time the metal film is applied. This step of the method is not anticipated, nor made obvious by any of the prior art references. The same may be said about Claims 18 and 19 which marry the film to the bead by utilizing a heated rubber roller at prescribed temperatures.

Summary

In view of the amendments to the claims, the arguments set forth herein and above, Applicant urges that the Claims now recite patentable subject matter, the Examiner should withdraw his rejections, the case should be allowed with Claims 15 and 17-19 and passed to allowance. Such action is accordingly requested.

Respectfully submitted,



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MARKED UP VERSION SHOWING CHANGES MADE

IN THE CLAIMS:

Please amend the claims as follows:

15. (Amended) A method for making a glass panel having one or more decorative strips thereon which simulate strips of metal [a simulated metal strip applied thereto] in a decorative pattern, comprising:

- (a) applying with an X-Y plotter a raised rounded bead of air-curable acrylic resin in a prescribed pattern to at least one surface of the [a flat] glass [window or door] panel [surface], the rounded bead being 0.8 mm-1.1 mm in height above the surface of the glass panel at the highest point and 2.0 – 5.0 mm in width;
- (b) air curing said acrylic resin; and
- (c) applying a metal film to said raised bead of acrylic resin at a temperature sufficient to bond said metal film to said raised bead of acrylic resin.

Cancel Claim 16

17. (Amended) The method of Claim 15 wherein said acrylic resin bead is air-cured at [about 72° F] room temperature for [about] 24 to 48 hours until reaching a hardness of 65% on a 0% to 100% durometer scale when a 1.0 mm flat point needle is completely compressed against said resin bead for 3 seconds, creating a force of 10 Newtons at the needle.

18. (Amended) The method of Claim 15 wherein [said] the panel is intended for interior use and the metal film is aluminum which is applied by pressing [said metal] the film [for interior use] against said raised bead of acrylic resin with a rubber roller heated to a temperature in the range of [about] 300° F to 380° F.

19. (Amended) The method of Claim 15 wherein the panel is intended for exterior use and the [said] metal film is chrome which is applied by pressing [said metal] the film [for exterior use] against said raised bead of acrylic resin with a rubber roller heated to a temperature in the range of [about] 350° to 430° F.